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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|-----------------------|---------------------|------------------|
| 10/684,639   | 10/14/2003  | Alonzo W. Beasley JR. | 16147/09002 CON     | 3733             |
| 27530  | 7590        | 07/29/2004            | EXAMINER            |                  |
| NELSON MULLINS RILEY & SCARBOROUGH LLP<br>P.O. BOX 11070<br>COLUMBIA, SC 29211 |             |                       |                     | SINGH, ARTI R    |
|  |             | ART UNIT              |                     | PAPER NUMBER     |
|  |             | 1771                  |                     |                  |

DATE MAILED: 07/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |                 |  |  |
|---|-----------------|--|--|
| <b>Office Action Summary</b>  | Application No. | Applicant(s)   |  |
|   | 10/684,639      | BEASLEY, ALONZO W.<br><i>[Signature]</i>   |  |
| <b>Period for Reply</b><br><br><b>A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.</b> <ul style="list-style-type: none"> <li>- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.</li> <li>- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.</li> <li>- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.</li> <li>- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul> | Examiner        | Art Unit   |  |
|   | Ms. Arti Singh  | 1771   |  |
| <i>-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --</i>  |                 |  |  |
| <b>Status</b>   |                 |  |  |
| <p>1)<input type="checkbox"/> Responsive to communication(s) filed on _____.</p> <p>2a)<input type="checkbox"/> This action is <b>FINAL</b>.                    2b)<input checked="" type="checkbox"/> This action is non-final.</p> <p>3)<input type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213.</p>   |                 |  |  |
| <b>Disposition of Claims</b>  |                 |  |  |
| <p>4)<input type="checkbox"/> Claim(s) <u>1-29</u> is/are pending in the application.</p> <p>4a) Of the above claim(s) _____ is/are withdrawn from consideration.</p> <p>5)<input type="checkbox"/> Claim(s) _____ is/are allowed.</p> <p>6)<input checked="" type="checkbox"/> Claim(s) <u>1-29</u> is/are rejected.</p> <p>7)<input type="checkbox"/> Claim(s) _____ is/are objected to.</p> <p>8)<input type="checkbox"/> Claim(s) _____ are subject to restriction and/or election requirement.</p>   |                 |  |  |
| <b>Application Papers</b>   |                 |  |  |
| <p>9)<input type="checkbox"/> The specification is objected to by the Examiner.</p> <p>10)<input type="checkbox"/> The drawing(s) filed on _____ is/are: a)<input type="checkbox"/> accepted or b)<input type="checkbox"/> objected to by the Examiner.</p> <p style="margin-left: 20px;">Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).</p> <p style="margin-left: 20px;">Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</p> <p>11)<input type="checkbox"/> The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.</p>  |                 |  |  |
| <b>Priority under 35 U.S.C. § 119</b>   |                 |  |  |
| <p>12)<input type="checkbox"/> Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</p> <p>a)<input type="checkbox"/> All    b)<input type="checkbox"/> Some * c)<input type="checkbox"/> None of:</p> <p>1.<input type="checkbox"/> Certified copies of the priority documents have been received.</p> <p>2.<input type="checkbox"/> Certified copies of the priority documents have been received in Application No. _____.</p> <p>3.<input type="checkbox"/> Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</p>   |                 |  |  |
| <p>* See the attached detailed Office action for a list of the certified copies not received.</p>   |                 |  |  |
| <b>Attachment(s)</b>  |                 |  |  |
| <p>1)<input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2)<input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3)<input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br/>Paper No(s)/Mail Date _____.</p>   |                 | <p>4)<input type="checkbox"/> Interview Summary (PTO-413)<br/>Paper No(s)/Mail Date _____.</p> <p>5)<input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6)<input type="checkbox"/> Other: _____.</p> |  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-24, 26, and 28 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 6,455,449 to Veiga et al.

Veiga et al. disclose a coated woven textile fabrics woven with fibers and yarns of different materials and denier sizes to provide airbags and side curtains with improved physical characteristics (column 1, lines 6-14). Veiga et al. teaches that either the warp or fill yarns can comprise yarns of different deniers in an alternating or random pattern (column 3, lines 50-54). Patente discloses that utilizing a combination of woven yarns having differing deniers (column 3, line 26) forms a fabric having ridges and valleys (column 5, lines 22-25). The Examiner is equating said "ridges and valleys" to be the equivalent to the "crest and trough patterns" as desired by Applicant. When an uneven fabric surface comprising ridges and valleys is provided, it enables a greater surface area for coatings to adhere to (column 5, lines 25-28). The woven textiles of Veiga et al. may be coated with polyurethane, silicone rubber, polysiloxane, or polyamide and acrylic type polymers (column 5, lines 62-64), thereby anticipating claims 1, 2, 4, 14, 21, 23 and 29, which require either a urethane or silicone coating.

The textile of Veiga et al., employs multifilament yarns (column 5, line 51) having a linear density ranging from 70 to 1200 denier (column 6, lines 8-10), and a weave count ranging from about 20 to 150 yarns per inch (column 6, lines 10-12). In the working examples shown in Column 6, lines 43 onwards, Patentee shows many different examples where the yarns are of differing denier sizes, that is one larger than the other e.g. 420D, 315D, 210 D etc. Additionally, in column 4, Veiga et al specifically teach the use of a first yarn being 420D and a second yarn being 315D; and 315D as the first and 210D as the second, thus meeting the limitations for claims 10, 11, 16, 17, 24 and 26. Although the preferred textile material for use in airbags, are yarns made of nylon and polyester (column 5, lines 34-36), other non-polymeric materials such as graphite, natural fibers or blends of natural fibers such as cotton (column 5, lines 45-50). Thus, meeting the limitations of thread count and yarn size as recited in the claims.

Veiga et al. disclose that different weave patterns may be used in their textiles, such as plain, basket and twill just to name a few (column 6, lines 23-39). Therefore, Veiga et al. clearly anticipate claim 12, which further limits the weave to be a plain weave, and claims 13, which further limit the fabric to a twill weave.

Thus, in summation, Veiga et al. teach a coated base fabric used in airbags, comprising a base fabric made from synthetic multifilament yarns, which may be arranged in an alternating pattern in either or both the warp and fill directions of a plain or twill weave. The yarns of Veiga et al. may be of varying deniers, that is 70D to 1200D, and woven into a fabric having a weave count of 20-150 yarns per inch. Therefore, Claims 1-24, 26, and 28 are found to be anticipated by Veiga et al.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 25, 27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Veiga et al. (USPN 6455449).

5. Veiga et al teach what is set forth above and but do not specially show their thread count to be exactly 46 threads per inch in the warp and 48-50 threads per inch in the fill (claim 25) ; or exactly 59 threads per inch in the weft and 60-65 threads per inch in the warp (claim 27); or the specifics of claim 29 being a 420 D with a filament aggregate of 136 filaments and a thread count of 49\*49. Veiga et al disclose the claimed invention except for the aforesaid limitations. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have employed the specific thread counts or filaments aggregates in the fabric of Veiga et al., since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

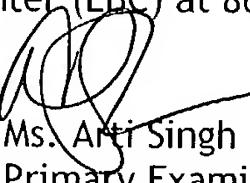
Additionally, a skilled artisan would have thought to use the specific thread counts and filament size in the composite of Veiga et al, motivated by the reasoned expectation to provide an airbag, which was impermeable due to the tightness of the weave.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ms. Arti Singh whose telephone number is 571-272-1483. The examiner can normally be reached on M-F 9-7pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ms. Arti Singh  
Primary Examiner  
Art Unit 1771

ars  
July 26, 2004